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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,175	03/30/2006	Gerd Loehden	284709US0PCT	4074
22850 7590 01/28/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER GILLESPIE, BENJAMIN	
			ART UNIT	PAPER NUMBER
			1796	
			NOTIFICATION DATE	DELIVERY MODE
			01/28/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/574,175	Applicant(s) LOEHDEN ET AL.	
	Examiner BENJAMIN J. GILLESPIE	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/30/2006; 4/3/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 is rejected because “acylonitriles” is not a recognized compound.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hung et al (‘656) in view of Calder et al (EP 0 247 426) and in further view of McGinniss et al (‘563). Hung et al teach hot-melt adhesives comprising a mixture of (A) isocyanate-functional prepolymer, (B) hydroxyl-functional polymer, and (C) additives, wherein (A) is produced by

Art Unit: 1796

addition polymerization of ethylenically unsaturated monomers, and (A) and (B) are present in amounts ranging from 10-70 wt% and 30-90 wt% respectively (Abstract; col 4 lines 55-61).

4. Component (A) is the reaction product of aromatic polyisocyanate and one or more polyhydroxyl compound (Col 2 lines 25-33, 45, 52-53). Component (B) has a molecular weight ranging from 4,000 to 12,000, a Tg between 15 and 85 °C, a hydroxyl number between 5 and 15, and is the reaction product of hydroxyl-functionalized monomers and monomers without hydroxyl groups, such as vinyl esters, vinyl ethers, fumarates, maleates, styrene, and acrylonitrile (Col 3 lines 21-47, 66-67; col 4 lines 1-4, 44-45).

5. Component (C) comprises catalysts, tackifiers, antioxidants, pigments, and stabilizers (Col 4 lines 55-61). Hung et al go on to teach the hot-melt adhesive can bond to materials such as glass and is produced by reacting components (A) and (B), however, patentees fail to teach each method of polymerization listed in claim 9 as well as the polydispersity of claims 1 and 8.

6. Calder et al also teach polyurethane based adhesives comprising a mixture of (A) isocyanate-functional prepolymer and (B) hydroxyl-functional polymer based on the addition polymerization of ethylenically unsaturated monomers (Abstract; pages 3 and 6). Calder et al go on to teach that it is preferred to utilize polymers for component (B) having polydispersity indices less than 3, however, patentees still fail to specifically teach an index less than 1.9, as well as the corresponding method of production.

7. McGinniss et al teach hydroxyl-functional addition polymers based on “any ethylenically unsaturated monomer”, wherein said polymer is useful in the product of polyurethane adhesive (Abstract; col 4 lines 14-17). In particular, patentees teach that by using atom transfer radical

polymerization (ATRP), one can achieve a polydispersity index as low as 1.05, and column 6 lines 25-52 shows polymerization via fractionation (Col 2 lines 8-15).

8. Therefore, it would have been obvious to utilize a polymer having a polydispersity lower than 1.9 for component (B) in Hung et al since low indices are disclosed as being preferable for analogous compositions used in the same applications, and McGinniss et al teach how said indices are obtained.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN J. GILLESPIE whose telephone number is (571)272-2472. The examiner can normally be reached on 8am-5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rabon Sergent/

Application/Control Number: 10/574,175
Art Unit: 1796

Page 5

Primary Examiner, Art Unit 1796

B. Gillespie